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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,872	07/24/2001	Yasumichi Kuwayama	Q65548	4044

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EXAMINER

GUSHI, ROSS N

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 05/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,872

Applicant(s)

KUWAYAMA ET AL.

Examiner

Ross N. Gushi

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-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,4,6,7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/24/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other: _____

Drawings

Figure 12 and 14 -19 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). **Correction is required in response to this Office action and corrections may not be held in abeyance.**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. ("Chen"). Chen discloses an electric connecting terminal 10 capable of being connected to a flat circuit body comprising a plane portion (11); a pair of piercing portions 12 erected from opposite side edges of the plane portion adapted to penetrate through a coating and a conductor of the flat circuit body and fold tips thereof in such a direction as to approach each other, wherein the piercing portions include a root portion and a distal portion, an internal surface of the distal portion being inclined with respect to an internal surface of the root portion so that the distal portion is tapered (see figure 1).



Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen as in claim 1 in view of Murakami

5. Regarding claim 2, Chen does not show the outer surface of the piercing portion as being tapered. Murakami shows both the internal and external distal portions of the piercing portions being tapered with respect to the root portions (see attachment). At the time of the invention, it would have been obvious to taper the inner surface, the outer surface, or both, as taught in Murakami. The suggestion or motivation for doing so would have been to facilitate piercing of the attached flexible circuit as taught in Murakami and Chen. The decision as to whether to taper only the inner surface, only the outer surface, or both would have been an arbitrary engineering design choice (as stated by Chen, col. 4, lines 1-6), given that all the configurations are well known in the art.

6. Claims 4, 6, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen as in claim 1 in view of Koch et al. ("Koch"). Chen discloses an electric connecting terminal 10 capable of being connected to a flat circuit body comprising a plane portion (11); a pair of piercing portions 12 erected from opposite side edges of the plane portion adapted to

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penetrate through a coating and a conductor of the flat circuit body and fold tips thereof in such a direction as to approach each other, wherein the piercing portions include a root portion and a distal portion, an internal surface of the distal portion being inclined with respect to an internal surface of the root portion so that the distal portion is tapered (see figure 1). It may be arguably ambiguous whether the Chen lower root portions of the piercing portions have a constant width (although as shown in figure 1 the piercing portions appear to have such a configuration). Koch discloses a terminal including piercing portions 13 including that the root portions have a constant width portion (see figures 1 and 2). At the time of the invention, it would have been obvious to have the Chen root portions have a constant width section, as taught in Koch. The suggestion or motivation for doing so would have been to facilitate piercing of the cable insulator as taught in Koch. Furthermore, the decision of whether the root portion would be tapered or have a constant width would have been a matter of design engineering choice given that both configurations are well known in the art (see for example figure 8 in Chen and note that Chen states that the particular tapering configuration is arbitrary, col. 4, lines 1-7).

7. Per claims 7, 9, the Chen and Koch piercing portions become narrow towards the tip.
8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen and Koch as in claim 6 in view of Murakami as discussed regarding claim 2 for the reasons discussed regarding claims 6 and 2.

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection. However, regarding Murakami, the examiner disagrees with applicant's assertion that the Murakami piercing portions are tapered on the exterior surface

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only. Murakami clearly shows the internal surface tapered section demarcation line in figure 1 and the demarcation point is also discernible in figure 2 (see attachment).

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (703) 306-4508. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at (703) 308-2319. The phone number for the Group's facsimile is (703) 308-7766

rng



P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Fig 1

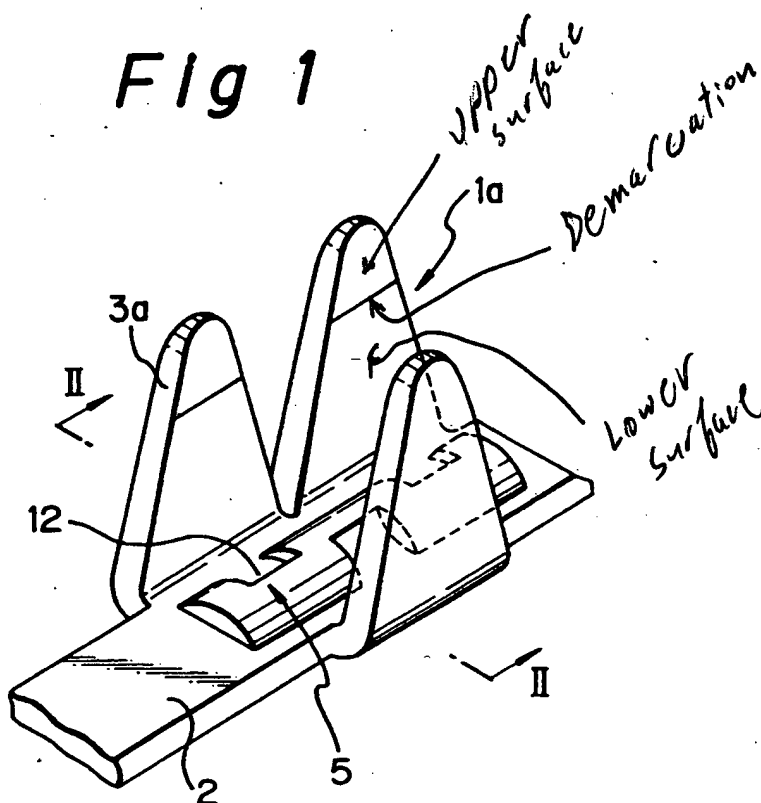


Fig. 2

